Bridging Gaps in Radiology Education: Evaluating Medical Student Perceptions and Access to Radiology Using a Virtual Intensive Program

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Purpose

- Radiology is largely unknown to most medical students, especially those without personal connections to the field. Institutional resources and priorities, region, and demographics can limit the extent of radiology exposure available during medical school. The Radiology Student Interest Group (RadSIG) Virtual Intensive Program addresses inequity in traditional career discovery pathways by targeting underrepresented students and those with minimal prior radiology exposure.
- This study evaluates student perceptions of radiologists, attitudes toward radiology as a specialty, and RadSIG's methods for enhancing equitable access to the profession and career-advancing opportunities.

Methods

- Four part live Zoom seminar series covering topics on radiology careers, imaging case reviews, intersections with pathology, global health.
- Attendees recruited via outreach to radiology interest group leaders at medical schools nationwide, who distributed details to their student bodies, and via promotion on social media platforms.
- Electronic entry and post surveys evaluated participant perceptions and shifts in understanding of radiology. Attendance data was tracked.

Results

- Data collected across three years (2021–2023) revealed positive shifts in perceptions and understanding of radiology.
- There were 698 respondents comprised of 534 MD (77.5%) and 155 (22.5%) DO students. 199 respondents (28.9%) identified with a URM group (Latinx, African-American, LGBTQ+, etc.)
- 360 (52.5%) students identified as female, 326 (47.3%) identified as male, and 3 students declined to respond.
- 59 (8.6%) indicated having family members in radiology.

Figure 1: Perceive Radiologists as Positive Role Models by Year

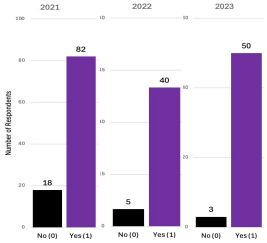


Figure 2: Believe Radiologists have Good Work Life Balance by Year

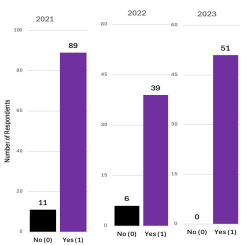


Figure 3: Family in Radiology by Year

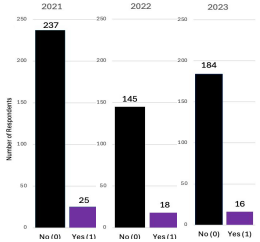


Figure 4: Prior Interest in Radiology by Year

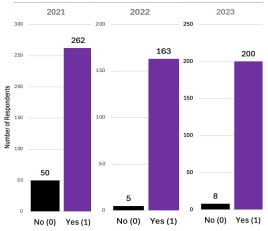


Figure 5: Participation in Radiology Research by Year

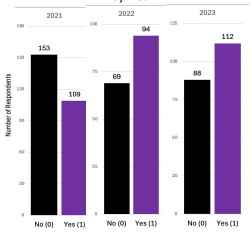


Figure 6: Believe Radiologists Actively Participate in Medical Education

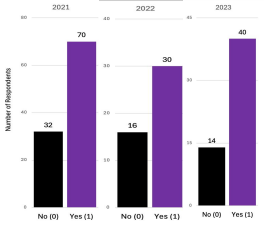


Figure 7: Self-Identified Gender Distribution by Year

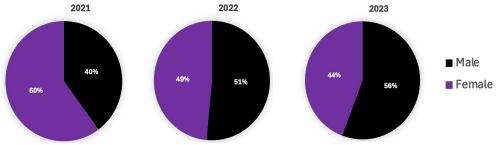
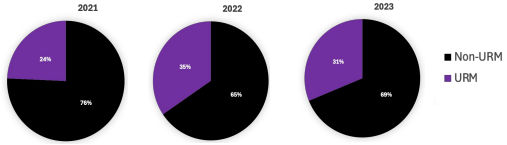


Figure 8: Self-Identified Underrepresented in Medicine (URM) Distribution by Year



Results (cont.)

- 407 (59.1%) students saw radiologists as approachable mentors, 424 (61.5%) viewed them as active educators in medical training, and 172 (80.0%) saw them as positive role models.
- 179 (83.3%) believed radiologists maintain a healthy work-life balance, and 53 (24.7%) believed radiologists regularly interact with patients.
- 625 (90.7%) students expressed a current interest in pursuing radiology while 63 did not. 411 (59.7%) had shadowed radiologists, and 315 (45.7%) were involved in radiology research.

Conclusions

- RadSIG's Virtual Intensive Series has successfully engaged hundreds of medical students across its first three years and has made strides in broadening the reach within medical student populations. Such programs provide exposure to the field of radiology for students and trainees without access to traditional career discovery pathways in radiology.